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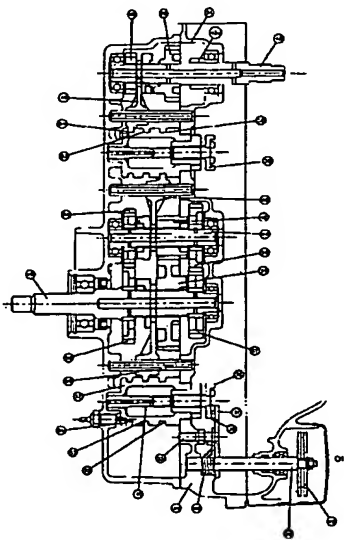
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(54) Title: IMPROVED TRANSMISSION SYSTEM FOR SCOOTERS



(57) **Abstract.** The improved transmission system comprises a gear train assembly and a gear shifting means; said gear train assembly comprises an input shaft (43), which is provided with an integral gear (43a), an intermediate shaft (44) an output shaft (45) an input fork (46), an intermediate fork (48), an output fork (50), three dog gears (47, 49, 51), four slotted gears (55, 56, 57, 58), and gear (59). The said gear shifting means comprises a crank case assembly (34), a sector plate (42), a gear shifting lever assembly (30), a gear shift lever (31) having a slot (32), a pair of lanced projection (36, 36a), an integral bent lug (39, 39a), six numbers of gear shifting pins (35), a drum assembly (37) provided with milled profiles (52, 53, 54), a spring loaded inhibitor (38), a stopper pin (33), a compression spring (41) and a torsion spring (40). The said gear shifting lever assembly (30) is fastened to said sector plate (42) at one end thereof and said gear shift lever (31) is welded at the other end, said sector plate (42) is operable through control means provided; said gear shifting lever assembly (30) being connected to said crank case assembly (34) by said torsion spring (40). The said drum assembly (37) is rotatably fitted within said crank case assembly (34), said gear shifting pin (35) being slidably fitted through splines to said drum assembly (37) by said compression spring (41), said gear shifting pin (35) is operable by said lanced projection (36, 36a) and its movement is limited by said bent lug (39, 39a), said inhibitor (38) is connected to said gear shifting pin (35) through a torsion spring (66). The said input fork (46), intermediate fork (48), and output fork (50) is engaged in said milled profiles (52, 53, 54) on said drum assembly (37). The other ends of said forks (46, 48, 50) are connected to dog gears (47, 49, 51) respectively. The said gear (59) and dog gear (47) are rotatably fitted on said input shaft

(43), said slotted gears (55, 56) and dog gear (49) are rotatably fitted on said intermediate shaft (44) and said slotted gears (57, 58) and dog gear (51) are rotatably fitted on said output shaft (45) to achieve the desired gear ratios and resetting said sector plate (42) and said control means back to its normal position.